A Robot Arm Controller Design with Visual Discrimination Capability by Using ingle-Chip

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ABSTRACT

Manufactory automation in medium and small size business is a very important development point in Taiwan. In order to improve the production cost and working enviroment, this proposal proposes a robot arm system with visualdiscrimination function by using single-chip 51 microprocessor controller.We expert that this research can not only provide a good study of system integration, but up grade the production line of small size business currentlyin Taiwan. Visual system has very strong discrimination capability, with these, wesyrongly believe that the recognition efficiency and quality control of producton line can be apparently increased. Besides, we also design a robot arm controller by using single-chip 51 microprocessor to integrate and verifythe ideas we proposed.

Keywords : Visual Discrimination System ; Single-Chip Microprocessor Controller ; Visual Feature Extractio

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